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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,175	07/07/2003	Satoshi Kitamura	SIC-03-016	1113
29863	7590	10/19/2004	EXAMINER	
DELAND LAW OFFICE P.O. BOX 69 KLAMATH RIVER, CA 96050-0069				BLOUNT, ERIC
		ART UNIT		PAPER NUMBER
		2636		

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/616,175	KITAMURA ET AL.
Examiner	Art Unit	
Eric M. Blount	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 07 July 2003.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 11-29 is/are allowed.

6)  Claim(s) 1-5 and 7-10 is/are rejected.

7)  Claim(s) 6 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 7/7/03 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12212003.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date.       .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other:       .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuhiko (JP 04368290) in view of Turner [U.S. Patent No. 6296072].

As for **claim 1**, Tatsuhiko discloses a bicycle display apparatus for mounting on a bicycle. The display device is capable of displaying information to a rider. The apparatus also includes a light sensor and a display control element coupled to the display for controlling the display device in accordance with the signals from the light sensor (See abstract). Tatsuhiko does not specifically disclose a display device capable of displaying various types of information. Turner teaches a bicycle information display device that is capable of displaying various types of information (column 16, lines 13-15). It would have been obvious to one of ordinary skill in the art to combine the display taught by Turner with the apparatus taught by Tatsuhiko so that various types of information could be made available to a rider. A rider may be interested in knowing several types of information such as speed, time of day, distance traveled, etc. This information might be helpful in planning a workout or a leisurely ride.

3. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuhiko in view of Turner as applied to claim 1 above, and further in view of Weindorf et al [U.S. Patent No. 6563479].

Regarding **claim 2**, Tatsuhiko does not specifically disclose a liquid crystal display unit. Weindorf et al disclose a liquid crystal display device, which includes a backlight, that is coupled to vehicles for providing users with information (column 4, lines 20-32). It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to combine the liquid crystal display device with the teachings of Tatsuhiko and Turner because a combination would result in a display device capable of providing different luminance levels. The different luminance levels would allow a rider to clearly view the display device regardless of the ambient lighting conditions.

As for **claims 3-5**, Tatsuhiko discloses a display control element which controls the backlight to turn on and off in accordance with the signals from a light sensor (See abstract). Weindorf et al disclose a display control element, which changes the brightness of the backlight in accordance with signals returned from a light sensor. The aforementioned inventors teach all of the limitations set forth by the claims. It would have been obvious to one of ordinary skill in the art to combine the teachings of the two inventors because both apparatus function in a similar manner. The control of the display and backlight in each invention depends upon a signal received from a light sensor. It is obvious that one may want to automatically adjust the luminance of the backlight for optimal viewing regardless of the ambient lighting.

4. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatsuhiko in view of Weindorf et al, and further in view of Turner [U.S. Patent No. 6296072].

As for **claims 7 and 8**, neither Tatsuhiko nor Weindorf et al disclose a light adapted to be mounted on a bicycle. Turner discloses a bicycle that includes a liquid crystal display and a headlight (column 16, lines 10-16). Turner does not specifically disclose a light sensor, which provides signals for controlling the headlight. However it would have been obvious to one of ordinary skill in the art to combine the headlight taught by Turner with the light sensors taught by Tatsuhiko and Weindorf et al. This would have been an obvious modification because the light sensors are used to detect ambient lighting. It is obvious that if one would need to adjust the display for viewing in a detected nighttime condition that a rider would also need to operate a headlight for viewing the area in the path of a vehicle. This feature would provide more safety for the riders as well as motorists sharing the road.

Regarding **claims 9 and 10**, Turner discloses an apparatus with a current generator for supplying electric power to the display (column 6, lines 20-52 and Figure 1B). The current generator taught by Turner is a motor. The motor is affixed to the frame of the bicycle. It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant that the motor could be mounted at any convenient location on the bicycle.

***Allowable Subject Matter***

5. **Claim 6** is objected to as being dependent upon a rejected base claim, but it appears that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
  
6. **Claims 11-29** appear to be allowable over the prior art. The following is a statement of reasons for the indication of allowable subject matter: There appears to be no prior art of record that describes or suggest an apparatus that controls the bicycle transmission in accordance with signals received from a light sensor. This along with other limitations set forth by the claims appears to render claims 11-29 allowable.

***Conclusion***

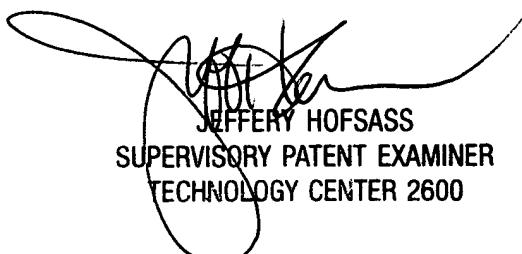
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Though not used in this action Kishimoto, Stubbs et al, and Iino all teach display devices for mounting on vehicles. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Blount whose telephone number is (571) 272-2973. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric M. Blount  
Examiner  
Art Unit 2636

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JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
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